

### **REMARKS/ARGUMENTS**

Upon entry of the amendments, claims 1-63 will be pending. Claims 3, 7-9, 21-23, 26, 29, 33-56 and 58-63 have been withdrawn in response to the Restriction Requirement. Reconsideration of claims 1, 2, 4-6, 10-20, 24, 25, 27-28, 30-32 and 57 is respectfully requested.

#### **I. Specification**

The specification has been objected to for not using capitalized letters for trademarks. In response, Applicants have revised the paragraphs with the trademarks being presented in capital letters. In view of the amendments, Applicants respectfully request the withdrawal of the objection.

#### **II. Sequence Compliance**

The Examiner has objected to the specification as allegedly failing to comply with the requirements for a Sequence Listing under 37 C.F.R. §§1.821 to 1.825.

In response, Applicants submit herewith a Substitute Sequence Listing and requests entry thereof in adherence with 37 C.F.R. §§1.821 to 1.825. This amendment is accompanied by a floppy disk containing the Substitute Sequence Listing, SEQ ID NOS:1-6, in computer readable form, and a paper copy of the sequence information which has been printed from the floppy disk.

The information contained in the computer readable disk was prepared through the use of the software program "FastSEQ" and is identical to that of the paper copy. This amendment contains no new matter.

In view of the foregoing, Applicant respectfully requests withdrawal of the present objection and entry of the Substitute Sequence Listing.

#### **III. Double Patenting**

Claims 1, 2, 4-6, 10-20, 24, 25, 27-28, 30-32 and 57 have been rejected under the judicially created doctrine of obviousness double patenting as being allegedly unpatentable over

claims 1-34 of U.S. patent No. 6,790,945. Applicants respectfully request that this rejection be held in abeyance until the present subject matter is found allowable. At that time, Applicants will take appropriate measures (e.g. filing a terminal disclaimer) to remove the double patenting rejection.

**IV. Rejection of claims 1, 2, 4, 5, 10-20, 24, 25, 27-28, 30-32 and 57 under 35 U.S.C. § 102(e)**

Claims 1, 2, 4, 5, 10-20, 24, 25, 27-28, 30-32 and 57 have been rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Lukhtanov et al. (U.S. Patent No. 6,790,945, hereinafter "Lukhtanov"). In response, Applicants submit herewith a Rule 1.132 declaration signed by the common inventors of the Lukhtanov patent and the present invention. In view of the declaration, Applicants believe that the rejection is overcome and respectfully request that the rejection under 35 U.S.C. § 102(e) be withdrawn.

**V. Rejection of claims 1, 2, 6, 10, 11, 13, 14, and 57 under 35 U.S.C. § 102(b)**

Claims 1, 2, 6, 10, 11, 13, 14, and 57 have been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Sinyakov et al. (Molecular Biology, 2001, 35, 251-260, hereinafter "Sinyakov"). Applicants respectfully traverse the rejection.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. M.P.E.P. § 2131.

Applicants assert that Sinyakov does not teach each and every element of the claimed invention. Sinyakov discloses oligopyrroles minor groove binding ligand having a terminal carboxylic acid group (see, abstract and formula 1 of Figure 1). Sinyakov further describes *neutral* oligonucleotide-oligopyrrole conjugates, where the oligopyrroles are linked to the same 5'-phosphate of the oligonucleotide and the synthesis thereof (see, abstract and Figure 3). As illustrated in Figure 3, the carboxylic acid groups on the oligopyrroles are converted into succinimide ester and used up in coupling with the oligonucleotide to form the conjugates (see, Figure 3). As a result, the oligonucleotide-oligopyrrole conjugates do *not* have any carboxylic acid group and are charge *neutral* (see, Figure 3). Therefore, Sinyakov fails to teach a negative

minor groove binder conjugate as recited in the claimed invention. Accordingly, Applicants respectfully request that the rejection of claims 1, 2, 6, 10, 11, 13, 14, and 57 under 35 U.S.C. § 102(b) over Sinyakov be withdrawn.

## **VI. Reference of Interest**

In the previous Office Action, the Examiner has cited an article by Bailey, Current Medicinal Chemistry, 2000, 7, 39-58, as being made a reference of interest. The Examiner states that Bailly teaches a negatively charged minor groove binder compound/moiety with an acidic sulphate ester attached to an aryl moiety (see, structure UCE 1022 in Figure 11 of Bailey).

We note that compound UCE 1022 is an *intercalator*, but not a minor groove binder. For example, page 51 second column, line 23 states: "Saintopin and its water-soluble analog UCE 1022 (Fig. 11) possessing a sulfate ester are considered as intercalating agents [146]". In contrast, the minor groove binders of the present invention are defined as *non-intercalating* compounds. Therefore, Bailey teaches away from the present invention.

## **CONCLUSION**

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 925-472-5000.

Respectfully submitted,



Zhe Wu  
Reg. No. 52,377

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, Eighth Floor  
San Francisco, California 94111-3834

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PATENT

Tel: 925-472-5000  
Fax: 415-576-0300  
Attachments  
ZW  
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